

1     **WHAT IS CLAIMED IS:**

2     1.     A method of counting a plurality of pipe segments at a well, comprising  
3     producing a magnetic field near the well, moving the plurality of pipe segments into or  
4     out of the well, detecting the changes in the magnetic field caused by the passing of the  
5     pipe segment connectors through the magnetic field, and counting the number of changes  
6     in the magnetic field to thereby produce a pipe segment count.

7     2.     The method of claim 1, wherein the plurality of pipe segments are selected from  
8     the group consisting of joints of casing, tubing and rods.

9     3.     The method of claim 1, wherein the pipe segment connectors are selected from  
10    the group consisting of couplings and collars.

11    4.     The method of claim 1, wherein the device capable of producing a magnetic field  
12    is selected from the group consisting of a magnetic induction device, a single magnet,  
13    two permanent magnets with like poles pointed in the same direction, Hall effect  
14    transducers, magneto sensors, and an energized coil of wire.

15    5.     The method of claim 1, wherein the changes in the magnetic flux are detected by  
16    a voltmeter attached to a coil of wire placed near the device capable of producing the  
17    magnetic field.

18    6.     The method of claim 1, wherein the changes in magnetic field are counted using a  
19    device selected from the group consisting of a relay-driven stepping mechanical counter  
20    and a GUI.

21    7.     The process of claim 1, wherein the pipe segment count is fed into a computer  
22    system.

23    8.     The process of claim 7, wherein the pipe segment count is automatically fed into  
24    an automatic spreadsheet.

25    9.     The process of claim 1, wherein the magnetic field detection device is embedded  
26    into or molded into a wiper rubber.

27    10.    The process of claim 9, wherein the magnetic field detection device is selected  
28    from a group consisting of a coil of wire or a Hall sensor.

29    11.    The method of claim 1, further comprising a processing module to filter the signal  
30    from the magnetic flux measuring device.

- 1     12.     The method of claim 11, wherein the processing module produces a pulse signal  
2     based on the filtered magnetic flux measuring device signal, wherein the pulse is  
3     indicative of the number of pipe segments passing into or out of the well.
- 4     13.     The method of claim 12, wherein a counter counts the number of pulses.
- 5     14.     The method of claim 1, wherein an alarm sounds each time a pipe segment  
6     passing into or out of the well.
- 7     14.     The method of claim 1, wherein the number of pipe segments passing into or out  
8     of the well is shown on a display.
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